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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,953	09/26/2003	Bin Zhang	200208037-1	9403
22879 7590 06/18/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER ONYEZIA, CHUKS N	
			ART UNIT 3692	PAPER NUMBER
			MAIL DATE 06/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/672,953

Applicant(s)

ZHANG ET AL.

Examiner

Chuks Onyezia Esq.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040212</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Requirement for Information***

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please provide the title, citation and copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing and relying on the formulas labeled equation 2-8. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

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*Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 9, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner finds applicants reliance to recited equation indefinite for not detailing how one would use this equation in determining a bid, which if any of the listed variables would one solve, and how are the listed variable's quantities or values determined. For the purpose of examination examiner interprets the variables are considered to determine a bid.

*Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Messmer et al. U.S. Patent Number 7,096,197 B2 (PTO-892 Reference A).

4. As per claim 1, Messmer teaches a method, comprising:

obtaining historical auction data (Col. 10 Lns. 1-5);

determining, from the historical auction data, a first parameter that is a function of a joint bid distribution and a density function related to the joint bid distribution (Col. 4 Ln. 61 - Col. 5 Ln. 24) examiner interprets sampling and clustering as density determinations;

selecting a bidder; obtaining a value distribution for the selected bidder (Col. 9 Lns 39-50); and

solving an equation that includes the first parameter and the selected bidder's value distribution, and not the value distribution of other bidders, to compute a bid value associated with the selected bidder for a given bid (Col. 9 Lns. 48-61)

5. As per claim 2, Messmer teaches the above limitations of claim 1. Messmer further teaches solving the equation comprises

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solving an ordinary differential equation that comprises a probability value distribution associated with the selected bidder and the derivative of the probability value distribution (Col. 9 Lns. 48-61).

6. As per claim 3, Messmer teaches the above limitations of claim 1. Messmer further teaches solving the equation comprises solving

$$\frac{d \log F_k(\phi_k(b))}{db} + \frac{1}{\phi_k(b) - b} = \Psi(b)$$

where  $\Psi(b)$  comprises the first value,  $b$  is a bid,  $\Phi_k(b)$  is the selected bidder's value distribution,  $k$  is an index identifying the selected bidder, and  $F(\Phi_k(b))$  is the probability value distribution for the selected bidder (Col. 9 Lns. 48-61).

7. As per claim 4, Messmer teaches the above limitations of claim 1. Messmer further teaches determining a first parameter comprises computing a ratio of the density function to the joint bid distribution (Col. 4 Ln. 61 - Col. 5 Ln. 24) examiner interprets sampling and clustering as density determinations.

8. As per claim 5, Messmer teaches the above limitations of claim 1. Messmer further teaches repeating the acts of selecting a bidder, obtaining a probability value distribution for the selected bidder and solving the equation for additional bidders (Col. 10 Lns. 6-10).

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9. Claim sets 6-11, 12-13, and 14-17 are rejected using logic similar to that used to reject claim set 1-5, (Col. 24 Lns. 16-40) examiner interprets that system limitations of above claims are detailed with the description of computer and internet network.

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*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Guler et al. U.S. Patent Publication No. 2002/0174052 A1 (PTO-892 Reference B) teaches a computer-implemented automated decision support system for designing an auction bid.

This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuks Onyezia Esq. whose telephone number is 571-270-1372. The examiner can normally be reached on Monday - Thursday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

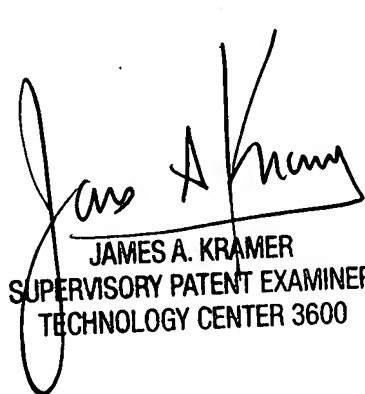


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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C. Onyezia 06/04/2007

 6/11/07  
JAMES A. KRAMER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600